

# Automated Railway Crossing Barrier 🚧



# Sri indu college of engineering and technology

## Title : Railway Accident Prevention and Signaling Innovation



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# Agenda

- 01 Introduction
- 02 Project overview
- 03 Aurdino UNO and it's Role
- 04 Hardware components
- 05 Conclusion





# Introduction :

- Railway accidents are a significant problem
- Effective signaling systems can help prevent accidents.
- My project aims to improve railway safety through innovative signaling.





## Project overview :

01

We have created an automated level crossing barrier and signaling system

02

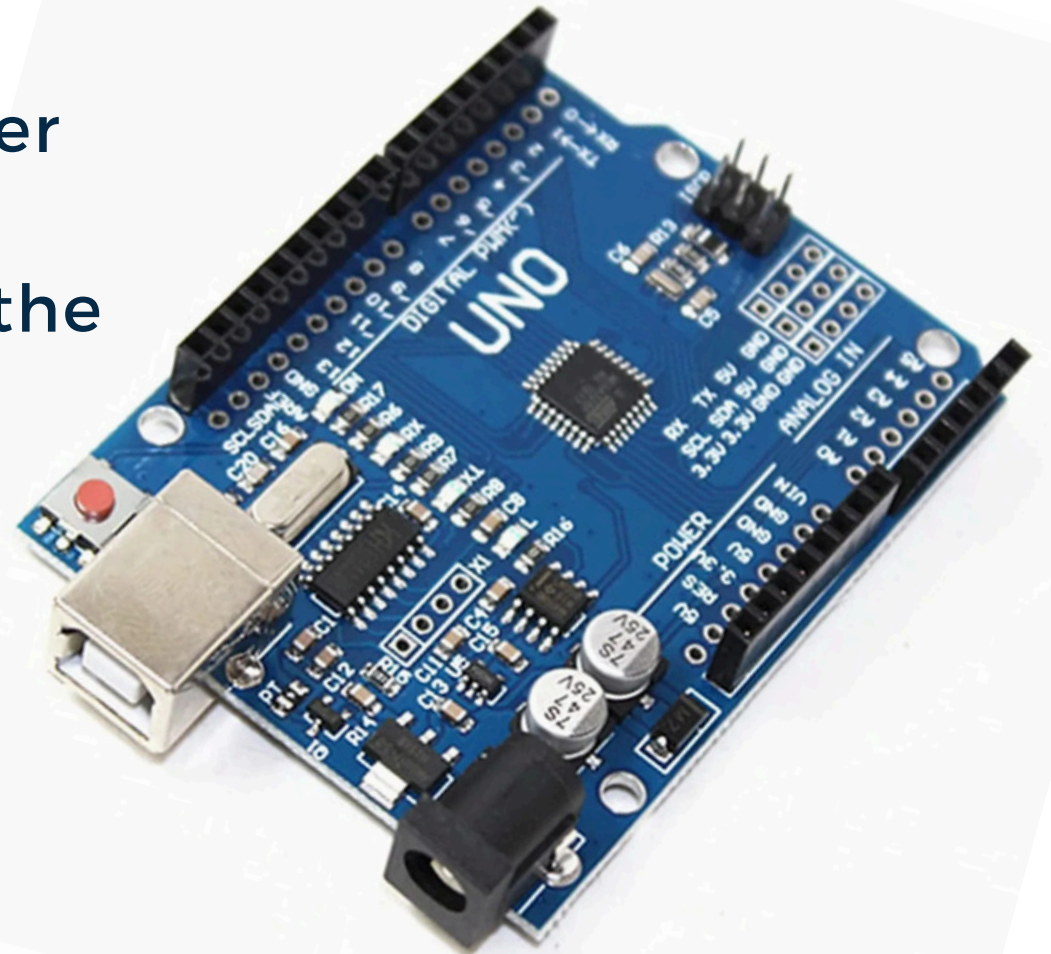
The system uses sensors to detect approaching trains.

03

When a train is detected, the barrier is lowered, and signals are activated.

# Arduino UNO & it's Role

- The Arduino UNO is the microcontroller at the heart of the system.
- It processes sensor data and controls the barrier and signals.



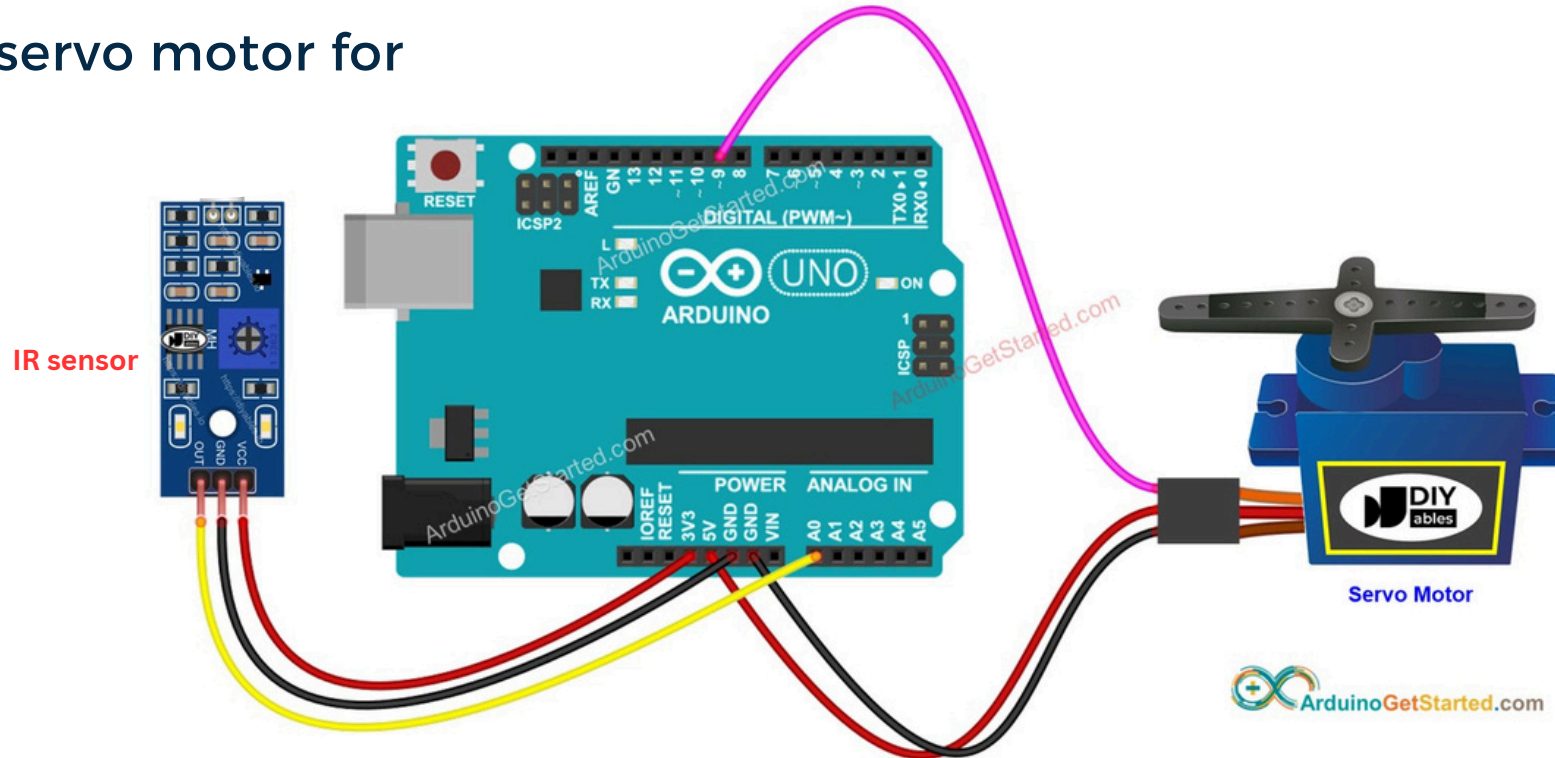
# Hardware components :

01 The system uses various hardware components, including:  
Sensors (e.g., IR sensors)

02 Actuators (e.g., micro servo motor for  
the barrier)

03 Arduino UNO

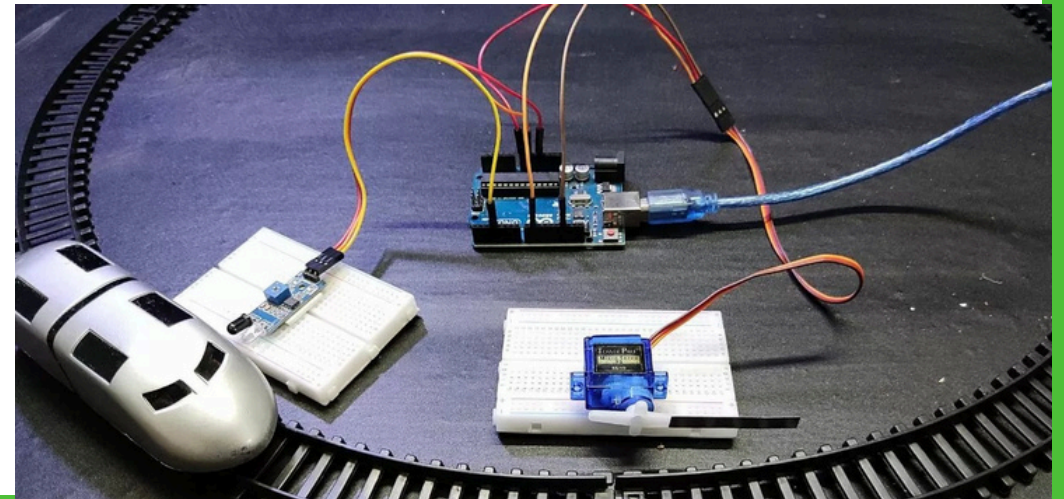
04 Jumping wires





# Conclusion :

- My project has the potential to significantly improve railway safety.
- The automated level crossing barrier and signaling system can prevent accidents and reduce fatalities.
- I believe this innovation can contribute to a safer and more efficient railway system.





# Thank You!

STEP  
2

Let the  
gate open

STEP  
3

Drive

